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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,014	05/05/2005	Shinya Kadono	2005_0637A	2743

52349 7590 10/27/2009

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EXAMINER	
ROBERTS, JESSICA M	

ART UNIT	PAPER NUMBER
2621	

MAIL DATE	DELIVERY MODE
10/27/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/534,014	KADONO, SHINYA	
	Examiner	Art Unit	
	JESSICA ROBERTS	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 August 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) *5-8 and 10-12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/11/07; 8/3/05; 5/5/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of the Application

Claims 1-12 are pending in this application. Applicants election ***without*** traverse of Species I (**claims 1-4 and 9**) in the replay filed on 08/10/2009 is acknowledged.

Claims 5-8, 10-12 will be treated as non-elected.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim(s) 1 is/are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent[1] and recent Federal Circuit decisions[2] indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example the coding picture method for generating a coded picture signal including the steps of "adding", "re-adding", "determining", and "prohibiting" is of

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[1] *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

[2] *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

sufficient breadth that it would be reasonably interpreted as a series of steps completely performed mentally, verbally, or with a machine.

The Applicant has provided no explicit and deliberate definitions to tie the method which includes "adding", "re-adding", "determining", and "prohibiting" to limit the deliberate particular apparatus or device.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art (herein referenced as AAPA) in view of Kadono et al. *Additional MMCO command for supporting more flexible bitstream switching* (herein referenced as Kadono) in view of Well Known Prior Art (Official Notice).

As to **claim 1**, AAPA teaches a picture coding method for generating a coded picture signal by repeatedly assigning a predetermined set of picture numbers in coding order to respective pictures included in a moving picture signal and coding the pictures on a picture-by-picture basis, the method comprising: an adding step of adding a memory management command to a second picture (AAPA teaches these memory management commands are added to the coded pictures for transmission, [0020]), the memory management command indicating management of a first picture of a predetermined picture number in a memory (AAPA teaches where picture numbers are assigned to respective pictures in order to indicate pictures to which memory management commands are applied and pictures have been added wit memory management commands in the case where the commands are to be retransmitted, [0022]),and a re-adding step of re-adding the memory management command to a section other than the second picture in the coded picture signal (AAPA teaches where In the case where the picture added with the memory management command is lost due a transmission error or the like, the ordering of the pictures in the memory cannot be properly reconstructed on the part of the picture decoding apparatus, and thus the pictures cannot be decoded, [0021]. In consideration of this problem, it is conceivable to transmit the memory management command (MMCO) again. This retransmission of the memory management command allows proper reconstruction of picture ordering in the memory by the retransmitted memory management command even if the picture added with the memory management command is lost due to a transmission error of the like, [0022]. Thus, it is clear to the Examiner that AAPA teaches to retransmit the memory

command when there are transmission problems or the like) the re-adding step includes: a determining substep of determining whether or not the first picture is located immediately previous to the section in coding order, among pictures of the predetermined picture number which are located earlier than the section in the coded picture signal; and a prohibiting substep of prohibiting the re-addition of the memory management command when it is determined in the determining substep that the first picture is not located immediately previous to the section ([0024]). AAPA is silent in re

However, Kadono teaches where the first picture and the second picture being different from each other, (see fig. 1 and fig. 3, PN).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Kadono with AAPA

AAPA (modified by Kadono) is silent in regards to determining whether or not the first picture is located immediately previous to the section in coding order, among pictures of the predetermined picture number which are located earlier than the section in the coded picture signal.

However, Official Notice is taken that both the concept and benefit of providing the limitations as claimed is notoriously well known and expected in the art, thus it would have been obvious to incorporate in AAPA (modified by Kadono) for providing improved image processing.

As to **claim 9**, see the rejection and analysis made for claim 1, except this is a claim to an apparatus with the same limitation as the method of claim 1.

As to **claim 2**, AAPA (modified by Kadono and, Well Known Prior Art) as a whole teaches everything as claimed above, see claim 1. In addition, AAPA teaches in the prohibiting substep, the re-addition of the memory management command is prohibited when it is determined in the determining substep that the first picture is located earlier than the reference point (AAPA teaches where an IDR picture is introduced in order to ensure that even if the picture rate or the like of a coded stream is switched in the middle of the stream, the subsequent coded picture stream can be properly decoded. This IDR picture is a picture for prohibiting reference to the pictures which are earlier than the IDR pictures, and the memory for the pictures are released and the information concerning the picture decoding is initializes at the point in time when this IDR picture is coded, [0024]. Thus it is clear to the Examiner that IDR picture prohibits the referring to the reference picture when the picture is before the IDR picture).

AAPA is silent in regards to wherein the determining substep, it is determined whether or not the first picture is located earlier than the reference point in the coded picture signal in coder order.

However, Official Notice is taken that both the concept and benefit of providing the limitations as claimed is notoriously well known and expected in the art, thus it would have been obvious to incorporate in AAPA (modified by Kadono) for providing improved image processing.

As to **claim 3**, AAPA (modified by Kadono and Well Known Prior Art) as a whole teaches everything as claimed above, see claim 3. In addition, AAPA teaches the picture coding method according to claim 2, wherein in the determining substep, an

editing point is handled as the reference point, the editing point being a point at which continuity of the coded picture signal is lost by editing (AAPA teaches in the case where the coded picture stream is edited, namely, in the case where another coded picture stream is newly generated by extracting part of each of a plurality of coded picture streams and combining them, inconsistency of the picture numbers of the like occurs in the combined point (editing point [0025]). Thus it is clear to the Examiner that AAPA discloses where editing point occurs where the continuity is lost by editing).

As to **claim 4,** AAPA (modified by Kadono and Well Known Prior Art) as a whole teaches everything as claimed above, see claim 2. In addition, AAPA teaches the picture coding method according to claim 2, wherein in the determining substep, a coded picture including information that prompts initialization of the memory is handled as the reference point (AAPA teaches a command o release the memory areas for all the pictures and initialize the information concerning picture decoding, [0017]. Furthermore, an initialization command, instead of the IDR picture, is sometimes used. The IDR picture initializes the decoding information of all the pictures including the picture number,[0024]. Thus is it clear to the Examiner that the IDR picture (reference point) initializes the release of the memory for all pictures and initializes decoding).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA ROBERTS whose telephone number is

(571)270-1821. The examiner can normally be reached on 7:30-5:00 EST Monday-Friday, Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621

/Jessica Roberts/
Examiner, Art Unit 2621